$$+\frac{B_1}{m^2\cdot 2!(2n)!}f^{(2n+2)}(a+\theta_2 x)-\frac{B_2}{m^4\cdot 4!(2n-2)!}f^{(2n+2)}(a+\theta_4 x)+\cdots$$

$$-(-1)^n\frac{B_n}{m^{2n}\cdot(2n)!\,2!}f^{(2n+2)}(a+\theta_{2n}x)\Big].$$

It will be noticed that this remainder may have its terms grouped into two sets whose terms correspond, term of one to term of the other, and such that all the terms of one set have positive, and all those of the other have negative, coefficients. Then by the lemma already proved, the f's in the two sets may be replaced respectively by $f^{(2n+2)}(a+\varphi_1 x)$ and $f^{(2n+2)}(a+\varphi_2 x)$ where φ_1 and φ_2 are positive and less than unity. Making these changes in (12) we have the following final value for the remainder term:

$$R_{2n+2}=x^{2n+2}\Big[\frac{1}{(2n+2)!}+\frac{1}{2m\cdot(2n+1)!}+\frac{B_1}{m^2\cdot 2!(2n)!}+\frac{B_2}{m^4\cdot 4!(2n-2)!}$$

$$+\cdots+\frac{B_{n-1}}{m^{2n-2}\cdot(2n-2)!\,4!}+\frac{B_n}{m^{2n}\cdot(2n)!\,2!}\Big] \tag{13}$$

$$\times[f^{(2n+2)}(a+\varphi_1 x)-f^{(2n+2)}(a+\varphi_2 x)].$$

NEW BOOKS.

Under this heading will be listed all new books received, which pertain to the general subject of mathematics as related to the collegiate and advanced secondary fields. So far as possible either short descriptive notices or more extended reviews will be given, according to the judgment of the committee having this department in charge. The chairman of this committee is Professor W. H. BUSSEY, of the University of Minnesota, Minneapolis, Minn., and the other members are Professor C. H. ASHTON, University of Kansas, Professor W. C. BRENKE, University of Nebraska, and Professor L. C. KARPINSKI, University of Michigan.

Publishers desiring to use this means of conveying to teachers of mathematics information concerning new books will please forward such books to the chairman of the committee.